

## Work Order ID 51923 - 2



Wednesday, September 09, 2009 11:35:25 A

Item ID: D2573

Revision ID: E

Item Name: Saddle, Aft Out 205

Start Date: 9/11/2009 Start Qty: 6.00

(1) Accept



Setup Start



Stop



Required Date: 9/18/2009 Req'd Qty: 6.00



Cust Item ID:

Customer:

Reference:

Approvals: Process Plan:

QC2

Date: 09-9-09 Tooling:

Date:

Run Start



QC:

Date: \_\_\_\_\_ SPC (Y/N):

Date: \_\_\_\_\_

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D2573	Rev E

100



HAAS CNC VERTICAL MACHINING #1

HAAS 1

HAAS CNC vertical machine #1

Memo

Program Batch No: 51923 Double check by: MW  1-Machine Step  
 No 1 per Folio FA051 and inspect per attached Dimension Sheets 2-Machine  
 Step No 2 per Folio FA051 and inspect per attached Dimension Sheets  3-  
 Machine Step No 3 per Folio FA051 and insp

PTO  
Last page

110



CONVENTIONAL MILLING MACHINE

Mill Conv

Conventional Milling Machine

Memo

Machine keyway as per dwg D2573 &amp; D2574

0.00

QC2 0909/27

1

120



QC2- Inspect parts off machine FAI/FAIB

0.00

QC2 0909/27

1

QC

Quality Control

0.00

Memo

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D2573 PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR: 51923		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
05-05-28	100	Ischelle flt bushing holes are 0.012" off from nominal. Origin error.	Q51042	Performed wft + test ASS'Y installation w skid, and the Ischelle flts. great.	AK 05/05/28	Q51042	Q51042	Q51042
		R.C. operates errver.		Acceptable				

NOTE: Date & initial all entries

**Work Order ID 51923**

Wednesday, September 09, 2009 11:35:25 A



Page 2

Item ID: D2573

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Start Date: 9/11/2009 Start Qty: 6.00



Cust Item ID:

Required Date: 9/18/2009 Req'd Qty: 6.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

130



QC8- Inspect parts - second check

0.00

b.A  
09/09/28

1

QC

Quality Control

140



Chemical Conversion Coat per QSI005 4.1

0.00

M 09/09/28

(x1)

q

HandFinish

Hand Finishing

Memo

0.00

150



White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

M 09/09/28  
⇒ M 09/09/28

(x1)

d

Powdercoat

Powder Coating

Memo

0.00

START TIME: 10:30AM OVEN TEMPERATURE:  
FINISH TIME: 11:00AM 320°F

**Work Order ID 51923**

Wednesday, September 09, 2009 11:35:25 A



Page 3

Item ID: D2573

Accept



Setup Start



Revision ID: E

Stop



Item Name: Saddle, Aft Out 205

Start Date: 9/11/2009 Start Qty: 6.00



Cust Item ID:

Required Date: 9/18/2009 Req'd Qty: 6.00



Customer:

**Reference:**

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

160

0.00

PL 09-09-28,

(1)



QC

Memo

Quality Control

170

Identify as per dwg &amp; Stock Location: \_\_\_\_\_

0.00



Packaging

Memo

Packaging

09/09/28 (1)

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

Quality Control

09/09/29 (1)  
MF 09-09-29

**Picklist Print**

Wednesday, September 09, 2009 11:35:30 AM

Page 1  
1

Work Order ID: 51923



Parent Item: D2573RevE



Parent Item Name: Saddle, Aft Out 205

Start Date: 9/11/2009

Required Date: 9/18/2009

Comments:

Start Qty: 6.00

Required Qty: 6.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D6101-007RevB 		Manufactured		No		100	Each	0.0000	6.0000 			

Saddle Billet

Batch# B46412

arL 09/09/27

DART AEROSPACE LTD				Work Order:	51923
Description: Saddle, Aft Outboard				Part Number:	D2573
Inspection Dwg: D2573 Rev. E				Page 1 of 1	

Inspect dimensions highlighted on inspection sheet drawing D2573 Rev. E and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				1	2	3	4		
A	0.438	0.443		.440	.440	.440	.440		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.001	8.000	8.000	8.002		
F	0.490	0.510		.504	485	.503	.509		
G	0.257	0.262		.258	.258	.258	.258		
H	0.375	0.380		.377	.377	.377	.377		
I	0.490	0.510		.502	.502	.501	.500		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		.568	.567	.568	.566		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.365	1.375		1.370	1.370	1.370	1.370		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	4.119	4.129		4.124	4.124	4.124	4.124		
P	0.115	0.135		.126	.127	.126	.126		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.250	.252	.251	.251		
S	0.115	0.135		.121	.121	.120	.122		
T	0.178	0.198		.188	.188	.188	.188		
U	3.210	3.250		3.230	3.230	3.230	3.230		
V	0.230	0.250		.240	.239	.239	.240		
W	0.115	0.135		.127	.126	.125	.130		
X	0.308	0.313		.310	.310	.309	.309		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		.364	.362	.362	.362		
AA	0.470	0.530		.500	.502	.502	.500		
AB	0.615	0.635		.629	.635	.632	.635		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.245	.245	.243	.245		
AE	1.500	1.520		1.515	1.518	1.516	1.515		
AF	0.115	0.135		.135	.135	.135	.135		
AG	0.240	0.280		.260	.260	.260	.260		
AH	0.240	0.260		.249	.247	.248	.249		
AI	2.000	2.020		2.003	2.001	2.002	2.002		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by:	JL	Audited by:	MA
Date:	09/04/25	Date:	07/07/25

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.26	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	28/07/25

DART AEROSPACE LTD				Work Order:	51923
Description: Saddle, Aft Outboard				Part Number:	D2573
Inspection Dwg: D2573 Rev. E				Page 1 of 1	

Inspect dimensions highlighted on inspection sheet drawing D2573 Rev. E and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				15	16	17	18		
A	0.438	0.443		.440	.440	.440	.440		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.000	8.000	8.003	8.004		
F	0.490	0.510	CHECK	SD1	SD1	.503	.501		
G	0.257	0.262	NCR	.260	.260	.260	.260		
H	0.375	0.380		.378	.379	.378	.378		
I	0.490	0.510		.500	.502	.501	.502		
J	1.174	1.184		1.179	1.178	1.179	1.178		
K	0.558	0.578		.567	.568	.566	.568		
L	1.174	1.184		1.179	1.178	1.179	1.178		
M	1.365	1.375		1.370	1.370	1.369	1.370		
N	2.495	2.505		2.499	2.499	2.499	2.500		
O	4.119	4.129		4.124	4.123	4.124	4.124		
P	0.115	0.135		.127	.128	.127	.130		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.257	.257	.257	.253		
S	0.115	0.135		.121	.122	.123	.124		
T	0.178	0.198		.188	.188	.188	.188		
U	3.210	3.250		3.228	3.228	3.227	3.227		
V	0.230	0.250		.236	.238	.237	.236		
W	0.115	0.135		.130	.130	.130	.128		
X	0.308	0.313		.304	.310	.310	.311		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		.365	.359	.358	.366		
AA	0.470	0.530		.500	.500	.500	.250		
AB	0.615	0.635		.635	.635	.635	.632		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.243	.244	.246	.245		
AE	1.500	1.520		1.516	1.512	1.515	1.518		
AF	0.115	0.135		.125	.125	.125	.125		
AG	0.240	0.280		.270	.270	.275	.270		
AH	0.240	0.260		.245	.248	.248	.248		
AI	2.000	2.020		2.004	2.001	2.004	2.007		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by:	<i>JWZ</i>	Audited by:	<i>H.A.</i>
Date:	09/09/22	Date:	09/09/22

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.26	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM <i>28</i>	<i>JWZ</i>

DART AEROSPACE LTD		Work Order:	51923
Description: Saddle, Aft Outboard		Part Number:	D2573
Inspection Dwg: D2573 Rev. E			Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2573 Rev. E and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				1/8	2/10	3	4		
A	0.438	0.443		.440	.440				
B	1.745	1.755		1.750	1.750				
C	3.495	3.505		3.500	3.500				
D	1.745	1.755		1.750	1.750				
E	7.990	8.010		8.004	8.005				
F	0.490	0.510		.500	.501				
G	0.257	0.262		.260	.260				
H	0.375	0.380		.378	.378				
I	0.490	0.510		.504	.502				
J	1.174	1.184		1.178	1.178				
K	0.558	0.578		.570	.569				
L	1.174	1.184		1.178	1.178				
M	1.365	1.375		1.370	1.370				
N	2.495	2.505		2.499	2.499				
O	4.119	4.129		4.125	4.125				
P	0.115	0.135		.124	.124				
Q	0.115	0.135		.135	.135				
R	0.240	0.260		.253	.252				
S	0.115	0.135		.124	.124				
T	0.178	0.198		.188	.188				
U	3.210	3.250		3.228	3.228				
V	0.230	0.250		.240	.241				
W	0.115	0.135		.133	.135				
X	0.308	0.313		.310	.310				
Y	0.760	0.765		.760	.760				
Z	0.352	0.372		.365	.362				
AA	0.470	0.530		.500	.510				
AB	0.615	0.635		.624	.626				
AC	0.053	0.073		.063	.063				
AD	0.240	0.260		.248	.249				
AE	1.500	1.520		1.512	1.509				
AF	0.115	0.135		.125	.125				
AG	0.240	0.280		.270	.270				
AH	0.240	0.260		.257	.257				
AI	2.000	2.020		2.002	2.000				
AJ	0.023	0.043		.033	.033				
Accept/Reject									

Measured by:	<i>John</i>	Audited by:	<i>H.A</i>
Date:	09/09/27	Date:	09/09/28

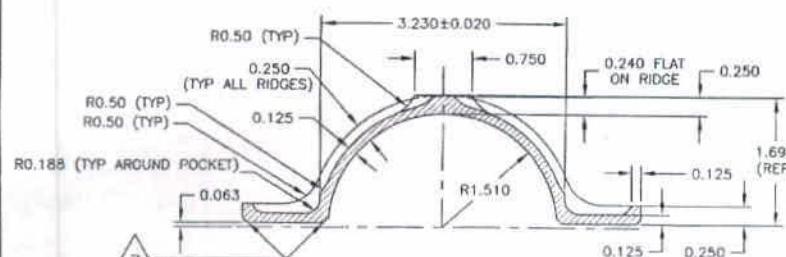
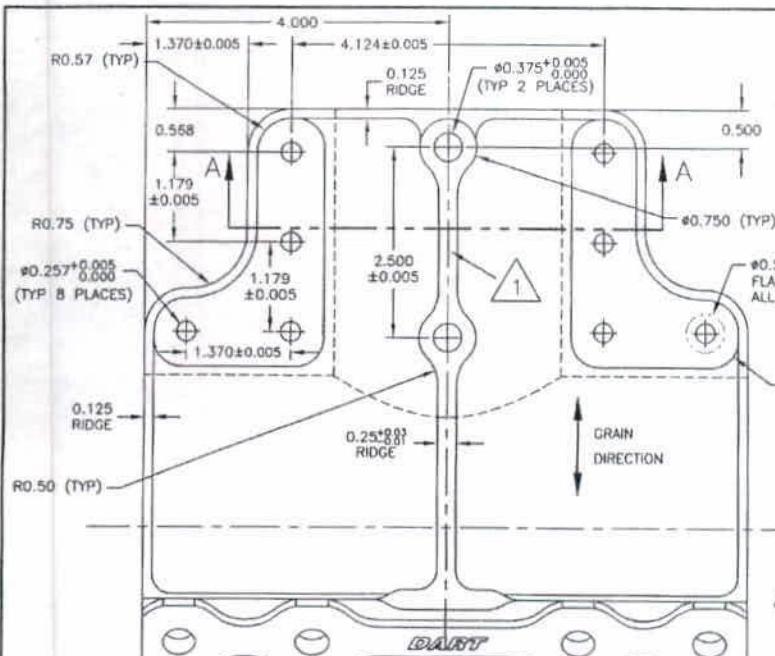
Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.26	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM <i>John</i>	<i>Jeff</i>

SIMPSON  
REEDER &  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT

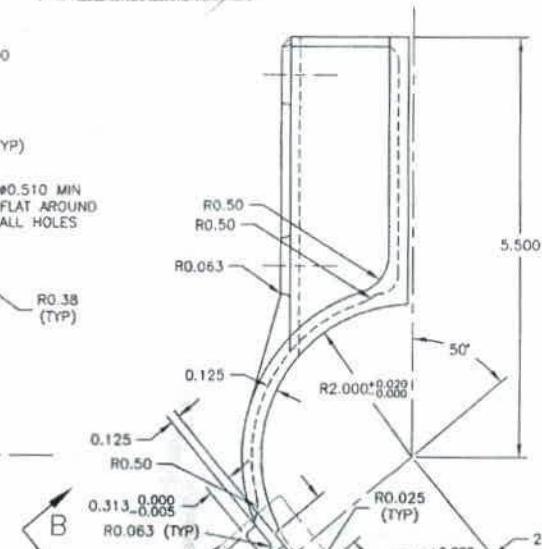
WITHOUT NOTICE  
WORK ORDER  
NO. 57922

RELEASED

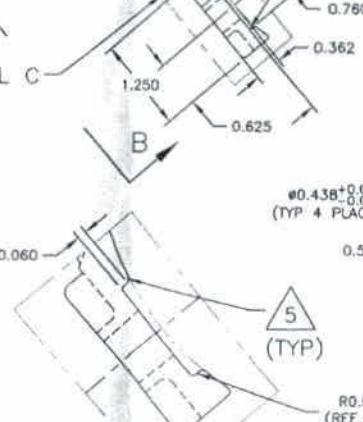
05.12.06 H



SECTION A-A



DETAIL C  
SCALE 4:3



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DART AEROSPACE LTD.

**NOTES**

MATERIAL: 7075-T7351 (QQ-A-250/12)  
(REF DART SPEC. D6102-001)  
FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1  
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER  
DART QSI 005 4.3  
BREAK ALL SHARP EDGES 0.010 TO 0.020  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

1 ENGRAVE PART AND BATCH NUMBER IN THIS AREA TO MAX DEPTH OF 0.010

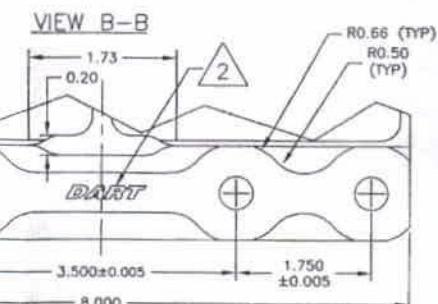
2 ENGRAVE DART LOGO TO MAX DEPTH OF 0.015 WITH MIN RAD 0.125

3 CHAMFER 0.063" × 45° AROUND THIS SURFACE (TYPICAL 2 PLACES)

4 CHAMFER 0.063" × 45° ALL AROUND

5 CHAMFER 0.033" × 45° (SEE DETAIL C) E

VIEW B-B



E	05.07.13	ADD CHAMFER ON RIDGE NOTE 5
D	02.09.06	ADD RIDGES; TIGHTEN TOLERANCES
C	99.10.22	INCORP. DEO 9123/9079/9102 ADD DIMENSIONS PER TSR A1177
B	96.12.02	ADD GRAIN DIR., 0.438 WAS 0.425
A	96.09.16	NEW ISSUE

DESIGN	DRAWN BY	DART AEROSPACE LTD. FARNSWORTH, ONTARIO, CANADA
DS	PH	REV. E
CHECKED <u>H</u>	APPROVED <u>H</u>	DRAWING NO. D2573
DATE 05.07.13	TITLE OUTER AFT SADDLE	SCALE 2:3